

GRANT
OVERHEAD SASH
PULLEYS
AND
HARDWARE SPECIALTIES

American Sash Pulleys

Grant Pulley & Hardware Co.
3 WEST 29TH STREET, NEW YORK

ALL OUR GOODS ARE PROTECTED BY UNITED STATES
PATENTS.

ALL OUR PULLEYS PACKED WITH SCREWS FINISHED TO
MATCH.

To avoid mistakes use numbers as
given.

Special prices to the trade. Write
for discounts.

Every pulley listed is numbered.

OUR PULLEYS ARE ALL MADE WITH
COMBINATION GROOVE TO FIT EITHER CHAIN OR CORD.

TERMS:

Strictly Thirty days net, or 2
per cent off for cash in ten
days from date of invoice.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Prices on American Steel Pulleys,
f. o. b. Philadelphia.

Prices on Grant Overhead Pulleys,
f. o. b. New York.

Goods in transit at purchaser's risk.

Claims for shortage must be made
immediately upon receipt of goods.

All orders taken by salesmen or sel-
ling agents are subject to our
approval and acceptance.

GRANT
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AND
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Grant Pulley & Hardware Co.
3 WEST 29TH STREET, NEW YORK

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

HOW TO SPECIFY
GRANT OVERHEAD PULLEYS AND SPECIALTIES

REGULAR DOUBLE HUNG WINDOWS — See page 4

All double hung sash are to be hung on Grant overhead pulleys, anti-friction bearing, bronze metal face, $2\frac{1}{2}$ " or 3", as required to hang the weights in the center of weight box. Pulleys are not to be put in place until sash are hung.

MULLION WINDOWS — See pages 8—10—12

All mullion double hung windows are to be hung on Grant overhead, anti-friction bearing, bronze metal face, $2\frac{1}{2}$ " or 3" pulleys, as required to hang the weights in the center of weight box at ends of frame.

All rising sash shall be equipped with Grant No. 0, bronze metal sash chains, for all sash weighing 150 lbs. or less. Sash weighing more than 150 lbs. shall have No. 00, sash chain as required to properly hang the sash.

The contractor must consult the architect in regard to the arrangement of the weights in Mullion windows before making the sash and frames.

TURNER ANTI-FRICTION DRAWER SLIDES

(See Pages 20—21)

All sliding drawers shall be equipped with "Turner" patent anti-friction drawer slides and supports. Where a load of more than fifty pounds is carried, the large size slides shall be used.

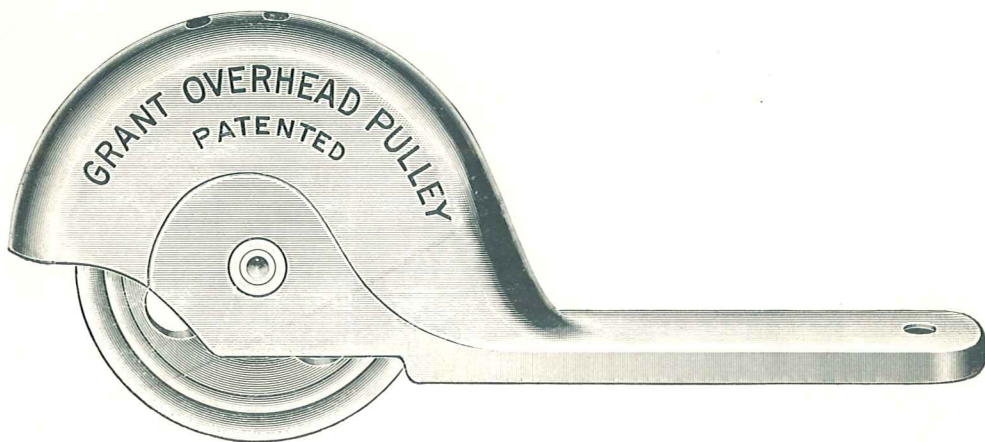
GRANT ANTI-FRICTION VERTICAL PIVOT LIFT

All sash specified or shown to be pivoted top and bottom to be equipped with Grant anti-friction cast bronze Vertical Pivot Lifts, finished to match adjoining hardware. All sash weighing one hundred pounds or less are to be equipped with No. 1 set. Those weighing more than one hundred pounds shall be equipped with the No. 2 set.

GRANT CASEMENT WINDOWS

All casement windows shown on drawings or specified to open in, shall be equipped with Grant Cast Bronze Anti-friction Casement Fixtures, finished to match adjoining hardware. All sash weighing fifty pounds or less are to be equipped with No. 1 Set. Those weighing more than fifty pounds shall be equipped with No. 2 Set. A third hinge to be used on all sash more than six feet high.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY



THE REASONS WHY THE GRANT OVERHEAD
PULLEYS ARE WANTED.

WHY YOU SHOULD SPECIFY GRANT OVERHEAD PULLEYS.

FIRST.—You gain several inches more pocket room in length, which enables you to use *iron* weights in place of lead where plate glass windows are used.

SECOND.—They are placed in the corner of the window frame concealed from view when the upper sash is closed.—See page 4.

THIRD.—The housings are made in one piece, which will resist any load without breaking.

FOURTH.—The chain, or cord, is easily inserted with a mouse, which we furnish with all orders.

FOR MULLION WINDOWS

The Grant overhead pulleys enable you to use a two-inch mullion instead of an eight-inch mullion, thus giving more light area.

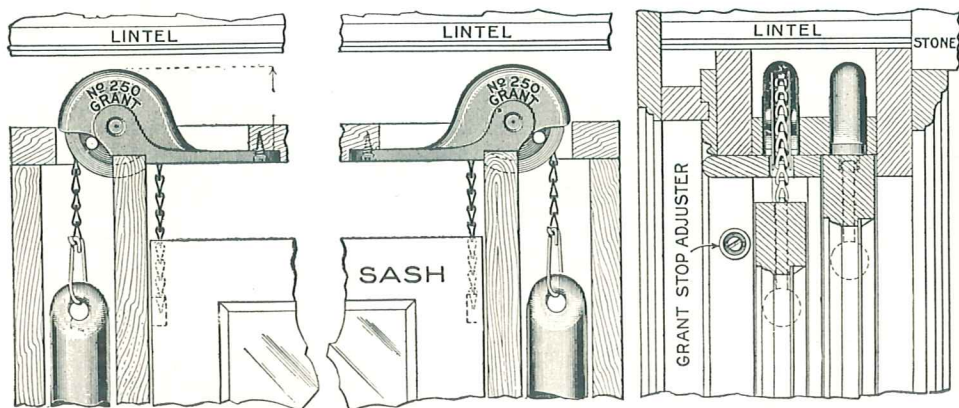
Pockets should be made $2\frac{1}{2}$ inches square, as one weight balances each sash, except the center sash in triplet windows.—See page 10.

All frames are cut for our pulleys with the regular pulley machines.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT PLAIN AXLE PULLEY

FOR SINGLE WINDOWS



CUT SHOWING SINGLE FRAME AND SECTION OF PULLEY
CONCEALED FROM VIEW WHEN IN USE

PATENTED

PRICE LIST

		LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
		-Per Doz.-		
No. 200—2	In. Pulley	\$2.70	\$4.00	\$5.40
No. 225—2½	In. Pulley	3.20	4.50	6.20
No. 250—2½	In. Pulley	3.50	5.20	7.00
No. 300—3	In. Pulley	4.60	6.40	8.60
No. 250—2½	In. Pulley, Brass Wheel.....	7.50	9.20	11.00
No. 300—3	In. Pulley, Brass Wheel.....	9.60	11.40	13.60

All pulleys are made with combination groove to fit either chain or cord.

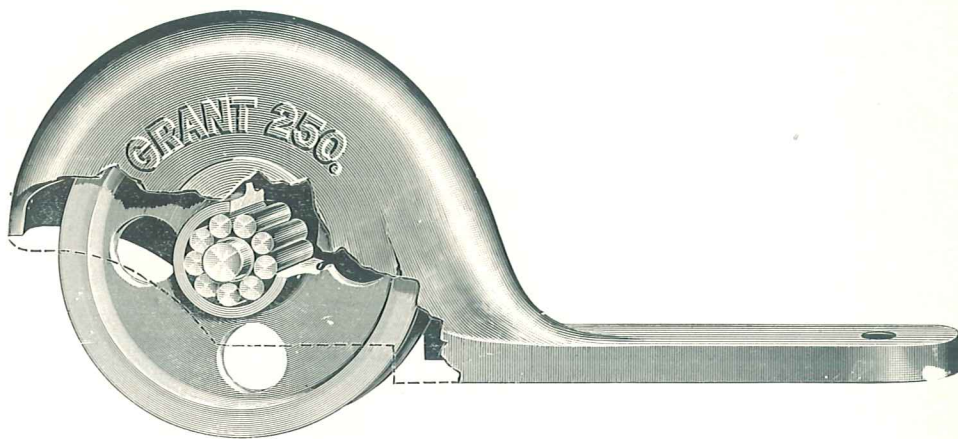
HEIGHTS OF HOUSINGS

No. 200.....	2¼ Inches
No. 225.....	2½ "
No. 250.....	2½ "
No. 300.....	3 "

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT ROLLER-BEARING AXLE PULLEY

FOR SINGLE WINDOWS



PATENTED

PRICE LIST

	LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
	Per Doz.		
No. 200—RB. 2 In. Pulley.....	\$4.00	\$5.30	\$6.90
No. 225—RB. 2¼ In. Pulley.....	4.50	5.80	7.50
No. 250—RB. 2½ In. Pulley.....	4.80	6.50	8.30
No. 300—RB. 3 In. Pulley.....	5.90	7.70	9.90
No. 250—RB. 2½ In. Pulley, Brass Wheel.....	8.80	10.50	12.30
No. 300—RB. 3 In. Pulley, Brass Wheel.....	10.90	12.70	14.90

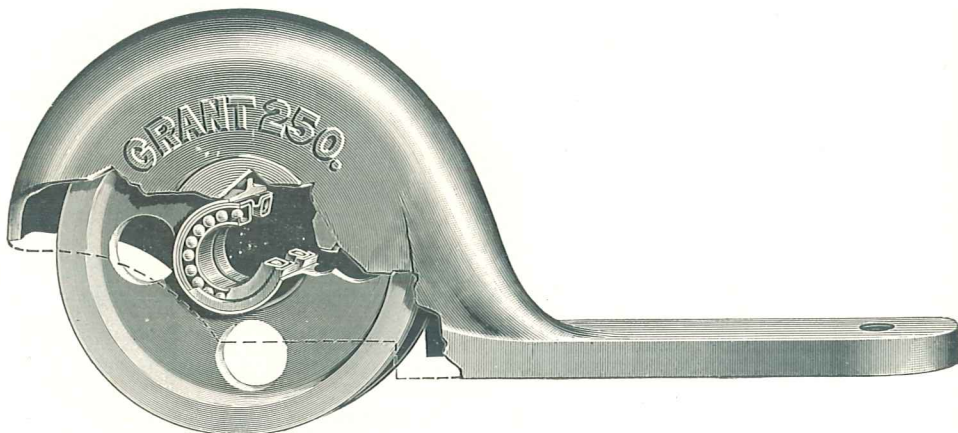
All Pulleys Are Packed With Screws Finished to Match.

For Height of Housings See Bottom Page 4

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT BALL-BEARING PULLEY

FOR SINGLE WINDOWS



PATENTED

PRICE LIST

	LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
	—Per Doz.—		
No. 200—BB. 2 In. Pulley..	\$7.70	\$9.00	\$10.40
No. 225—BB. 2½ In. Pulley.....	8.20	9.50	11.20
No. 250—BB. 2½ In. Pulley.....	8.50	10.20	12.00
No. 300—BB. 3 In. Pulley.....	9.60	11.40	13.60
No. 250—BB. 2½ In. Pulley, Brass Wheel.....	12.50	14.20	16.00
No. 300—BB. 3 In. Pulley, Brass Wheel.....	14.60	16.40	18.60

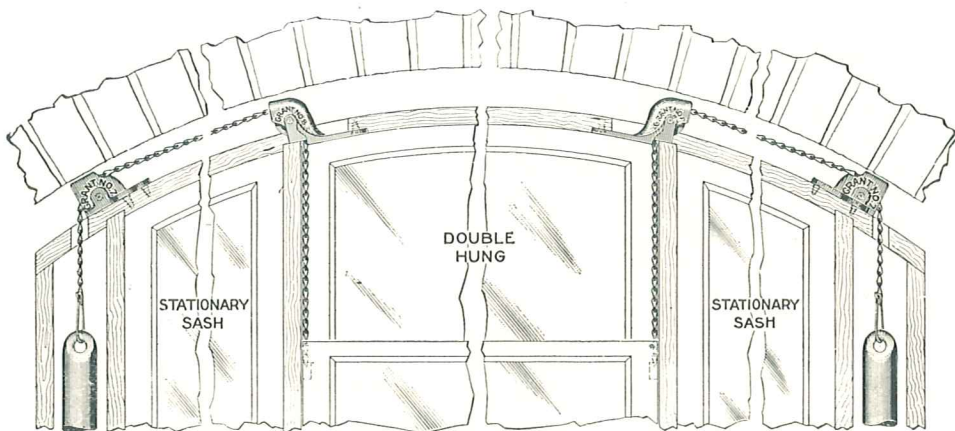
Write for Discounts.

For Height of Housings See Bottom Page 4

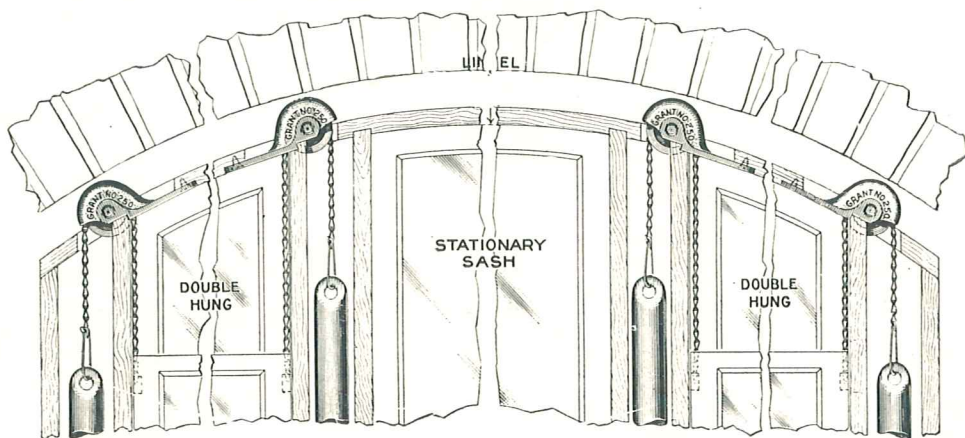
GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT OVERHEAD PULLEYS

Can be Used to Better Advantage in Segment Head Windows than Any Other Pulleys



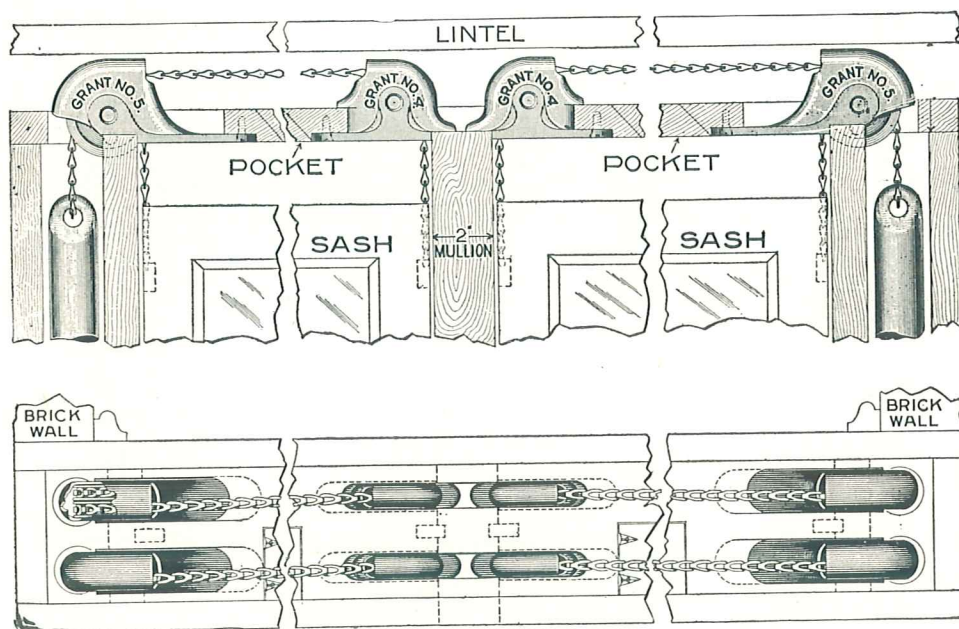
CUT SHOWING SEGMENT HEAD TRIPLE FRAME WITH GRANT PULLEYS,
HANGING CENTER SASH WITH WEIGHTS IN END POCKET 2-INCH MULLION.



CUT SHOWING SEGMENT HEAD TRIPLE FRAME WITH END SASH
HUNG ON GRANT PULLEYS.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT PULLEYS FOR TWIN WINDOWS



PATENTED

USE SASH CHAIN WITH ABOVE PULLEYS

PRICE LIST

	LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
No. 4—2 In Single Wheel.....per doz.	\$4.00	\$6.00	\$8.00
No. 5—2½ In. Double Wheelper doz.	8.00	12.00	16.00
Set of eight pulleys, as in cut.....	4.00	6.00	8.00
No. 254—2½ In. Single Wheel.....per doz.	6.00	8.00	10.00
No. 305—3 In. Double Wheel.....per doz.	12.00	16.00	20.00
Set of eight pulleys, as in cut.....	6.00	8.00	10.00

HEIGHTS OF HOUSINGS

No. 4.....	2½ Inches
No. 5.....	2¾ "
No. 6.....	3¼ "
No. 8.....	3½ "
No. 254.....	3¾ "
No. 305.....	3 "

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT PULLEYS FOR TWIN WINDOWS

ROLLER-BEARING AXLE

PRICE LIST

	LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
No. 4—RB. 2 In. Single Wheel.....per doz.	\$5.00	\$7.00	\$9.00
No. 5—RB. 2½ In. Double Wheel.....per doz.	10.00	14.00	18.00
Set of eight pulleys, as in cut	5.00	7.00	9.00
No. 254—RB. 2½ In. Single Wheel...per doz.	7.00	9.00	11.00
No. 305—RB. 3 In. Double Wheel...per doz.	14.00	18.00	22.00
Set of eight pulleys, as in cut	7.00	9.00	11.00

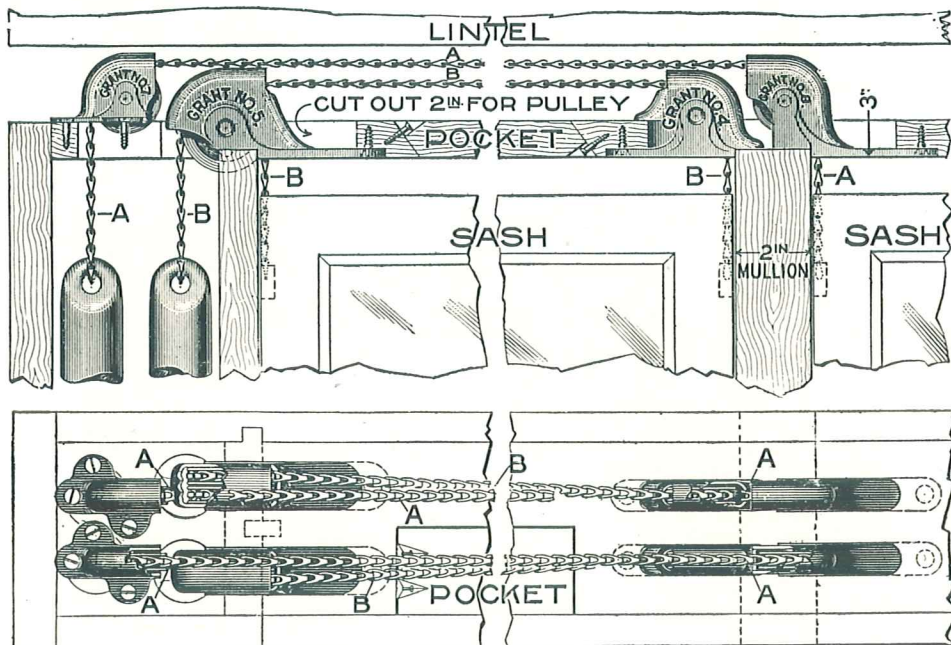
BALL-BEARING STEEL BUSHINGS

No. 4—BB. 2 In. Single Wheel.....per doz.	\$8.00	\$10.00	\$12.00
No. 5—BB. 2½ In. Double Wheel.....per doz.	16.00	20.00	24.00
Set of eight pulleys, as in cut.....	8.00	10.00	12.00
No. 254—BB. 2½ In. Single Wheel...per doz.	10.00	12.00	14.00
No. 305—BB. 3 In. Double Wheel...per doz.	20.00	24.00	28.00
Set of eight pulleys, as in cut.....	10.00	12.00	14.00
No. 254—BB. 2½ In. Single Brass Wheel, per doz.	14.00	16.00	18.00
No. 305—BB. 3 In. Double Brass Wheel, per doz.	28.00	32.00	36.00
Set of eight pulleys, as in cut.....	14.00	16.00	18.00

All pulleys are made with combination groove to fit either chain or cord.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT PULLEYS FOR TRIPLET WINDOWS



PATENTED

PRICE LIST

	LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
No. 4—2 In. Single Wheel.....per doz.	\$4.00	\$6.00	\$8.00
No. 5—2½ In. Double Wheel.....per doz.	8.00	12.00	16.00
No. 8—2 In. Single Wheel.....per doz.	6.00	10.00	14.00
No. 7—2 In. Single Wheel.....per doz.	*4.00	4.00	4.00
Set of 16 pulleys, as in cut.....	7.34	10.67	14.00
No. 254—2½ In. Single Wheel.....per doz.	6.00	8.00	10.00
No. 305—3 In. Double Wheel.....per doz.	12.00	16.00	20.00
No. 308—3 In. Single Wheel.....per doz.	10.00	14.00	18.00
No. 307—3 In. Single Wheel.....per doz.	*6.00	6.00	6.00
Set of 16 pulleys, as in cut.....	11.34	14.67	18.00

* Plain face—does not show.

USE SASH CHAINS WITH ABOVE PULLEYS

All Pulleys Furnished With Brass Wheels if Desired at Special Prices.

FOR HEIGHT OF HOUSINGS SEE PAGE 8.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT PULLEYS FOR TRIPLET WINDOWS

ROLLER-BEARING AXLE

PRICE LIST

		LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
No. 4—RB. 2	In. Single Wheel.....per doz.	\$5.00	\$7.00	\$9.00
No. 5—RB. 2½	In. Double Wheel.....per doz.	10.00	14.00	18.00
No. 8—RB. 2	In. Single Wheel.....per doz.	8.00	12.00	16.00
No. 7—RB. 2	In. Single Wheel.....per doz.	*5.00	5.00	5.00
Set of 16 pulleys, as in cut.....		9.34	12.67	16.00
No. 254—RB. 2½	In. Single Wheel....per doz.	7.00	9.00	11.00
No. 305—RB. 3	In. Double Wheel....per doz.	14.00	18.00	22.00
No. 308—RB. 3	In. Single Wheel....per doz.	12.00	16.00	20.00
No. 307—RB. 3	In. Single Wheel....per doz.	*7.00	7.00	7.00
Set of 16 pulleys, as in cut.....		13.34	16.67	20.00

BALL-BEARING STEEL BUSHINGS

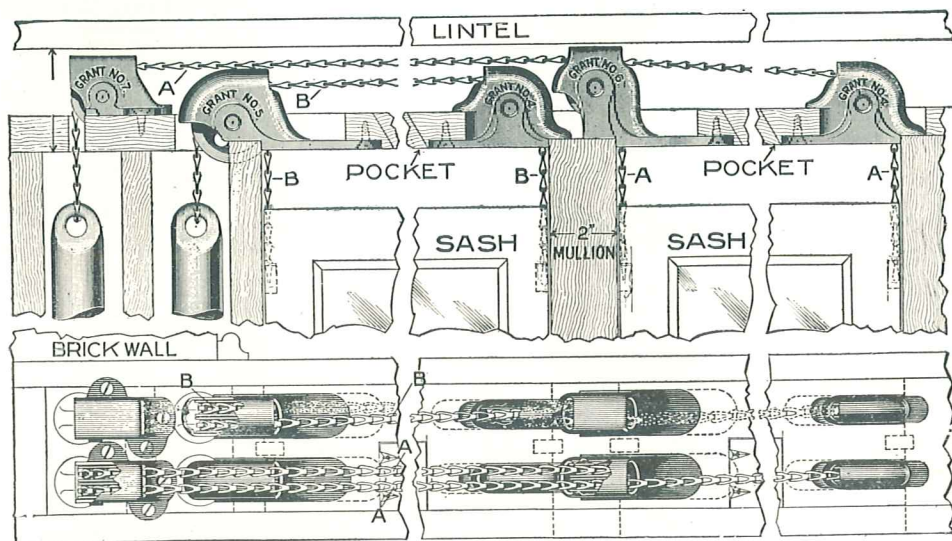
No. 4—BB. 2	In. Single Wheel.....per doz.	\$8.00	\$10.00	\$12.00
No. 5—BB. 2½	In. Double Wheel.....per doz.	16.00	20.00	24.00
No. 8—BB. 2	In. Single Wheel.....per doz.	14.00	18.00	22.00
No. 7—BB. 2	In. Single Wheel.....per doz.	*8.00	8.00	8.00
Set of 16 pulleys, as in cut.....		15.34	18.67	22.00
No. 254—BB. 2½	In. Single Wheel....per doz.	10.00	12.00	14.00
No. 305—BB. 3	In. Double Wheel....per doz.	20.00	24.00	28.00
No. 308—BB. 3	In. Single Wheel....per doz.	18.00	22.00	26.00
No. 307—BB. 3	In. Single Wheel....per doz.	*11.00	11.00	11.00
Set of 16 pulleys, as in cut.....		19.67	23.00	26.34
No. 254—BB. 2½	In. Single Brass Wheel, per doz.	14.00	16.00	18.00
No. 305—BB. 3	In. Double Brass Wheel, per doz.	28.00	32.00	36.00
No. 308—BB. 3	In. Single Brass Wheel, per doz.	26.00	30.00	34.00
No. 307—BB. 3	In. Single Brass Wheel, per doz.	*14.00	14.00	14.00
Set of 16 pulleys, as in cut.....		27.34	30.67	34.00

* Plain face — Does not show.

Special discount to the trade.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT PULLEYS FOR QUADRUPLE WINDOWS



PATENTED

PRICE LIST

		LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
No. 4—2	In. Single Wheel.....per doz.	\$4.00	6.00	8.00
No. 5—2½	In. Double Wheel.....per doz.	8.00	12.00	16.00
No. 6—2	In. Double Wheel.....per doz.	8.00	12.00	16.00
No. 7—2	In. Double Wheel.....per doz.	*6.40	6.40	6.40
Set of 20	pulleys, as in cut.....	10.15	14.14	18.14
No. 254—2½	In. Single Wheel.....per doz.	6.00	8.00	10.00
No. 305—3	In. Double Wheel.....per doz.	12.00	16.00	20.00
No. 306—3	In. Double Wheel.....per doz.	12.00	16.00	20.00
No. 307—3	In. Double Wheel.....per doz.	*10.40	10.40	10.40
Set of 20	pulleys, as in cut.....	15.47	19.48	23.47

* Plain face — Does not show.

USE SASH CHAINS WITH ABOVE PULLEYS

FOR HEIGHT OF HOUSINGS SEE PAGE 8

All our Goods are Protected by United States Patents.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT PULLEYS FOR QUADRUPLE WINDOWS

ROLLER-BEARING AXLE

		PRICE LIST		
		LACQUERED IRON FACE	BRONZE PLATED FACE	POLISHED BRONZE METAL FACE
No. 4—RB. 2	In. Single Wheel.....per doz.	\$5.00	\$7.00	\$9.00
No. 5—RB. 2½	In. Double Wheel.....	10.00	14.00	18.00
No. 6—RB. 2	In. Double Wheel.....	10.00	14.00	18.00
No. 7—RB. 2	In. Double Wheel.....	*8.40	8.40	8.40
Set of 20 pulleys, as in cut.....		12.80	16.80	20.80
No. 254—RB. 2½	In. Single Wheel....per doz.	7.00	9.00	11.00
No. 305—RB. 3	In. Double Wheel....	14.00	18.00	22.00
No. 306—RB. 3	In. Double Wheel....	14.00	18.00	22.00
No. 307—RB. 3	In. Double Wheel....	*12.40	12.40	12.40
Set of 20 pulleys, as in cut.....		18.14	22.14	26.15

BALL-BEARING STEEL BUSHINGS

No. 4—BB. 2	In. Single Wheel.....per doz.	\$8.00	\$10.00	\$12.00
No. 5—BB. 2½	In. Double Wheel.....	16.00	20.00	24.00
No. 6—BB. 2	In. Double Wheel.....	16.00	20.00	24.00
No. 7—BB. 2	In. Double Wheel.....	*14.40	14.40	14.40
Set of 20 pulleys, as in cut.....		20.80	24.80	28.80
No. 254—BB. 2½	In. Single Wheel....per doz.	10.00	12.00	14.00
No. 305—BB. 3	In. Double Wheel....	20.00	24.00	28.00
No. 306—BB. 3	In. Double Wheel....	20.00	24.00	28.00
No. 307—BB. 3	In. Double Wheel....	*18.40	18.40	18.40
Set of 20 pulleys, as in cut.....		26.14	30.14	34.14
No. 254—BB. 2½	In. Single Brass Wheel per doz.	14.00	16.00	18.00
No. 305—BB. 3	In. Double Brass Wheel	28.00	32.00	36.00
No. 306—BB. 3	In. Double Brass Wheel	28.00	32.00	36.00
No. 307—BB. 3	In. Double Brass Wheel	*24.40	24.40	24.40
Set of 20 pulleys, as in cut.....		36.15	40.14	44.14

* Plain face — Does not show.

All Pulleys Are Packed With Screws Finished to Match.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT OVERHEAD PULLEYS

FOR

SINGLE—TWIN—TRIPLE WINDOWS

Made Specially to Comply with United States Government
Specifications.

GRANT PULLEYS FOR SINGLE WINDOWS

ALL PULLEYS LISTED BELOW ARE STEEL BUSHED WITH
POLISHED BRONZE FACES.

PRICE LIST

ROLLER BEARING ANTI-FRICTION		Per Doz.
No. 250—2½ In. Pulley, Brass Wheel.....		\$13.80
No. 300—3 In. Pulley, Brass Wheel.....		16.40

BALL BEARING ANTI-FRICTION		
No. 250—2½ In. Pulley, Brass Wheel.....		\$16.00
No. 300—3 In. Pulley, Brass Wheel.....		18.60

Write for Discounts.

All Pulleys Are Packed With Screws Finished to Match.

All Pulleys Are Made With Combination Groove,
To Fit Either Chain or Cord.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT PULLEYS FOR TWIN WINDOWS

ALL PULLEYS LISTED BELOW ARE STEEL BUSHED WITH
POLISHED BRONZE FACES

ROLLER BEARING

No. 4.—2 In. Single Brass Wheel.....	per doz.	\$14.50
No. 5.—2½ In. Double Brass Wheel.....	"	29.00
Set of 8 pulleys, as in cut (Page 8).....	(Set A)	14.50

BALL BEARING

No. 4.—2 In. Single Brass Wheel	per doz.	\$16.00
No. 5.—2½ In. Double Brass Wheel.....	"	32.00
Set of 8 pulleys, as in cut (Page 8).....	(Set B)	16.00

GRANT PULLEYS FOR TRIPLET WINDOWS

PRICE LIST

ROLLER BEARING

No. 4.—2 In. Single Brass Wheel.....	per doz.	\$14.50
No. 5.—2½ In. Double Brass Wheel.....	"	29.00
No. 8.—2 In. Single Brass Wheel.....	"	25.50
No. 7.—2 In. Single Brass Wheel (Plain Face).	"	10.50
Set of 16 pulleys, as in cut (Page 10).....	(Set C)	26.50

BALL-BEARING

No. 4.—2 In. Single Brass Wheel.....	per doz.	\$16.00
No. 5.—2½ In. Double Brass Wheel.....	"	32.00
No. 8.—2 In. Single Brass Wheel	"	30.00
No. 7.—2 In. Single Brass Wheel (Plain Face).....	"	12.00
Set of 16 pulleys, as in cut (Page 10).....	(Set D)	30.00

Write for Discounts.

All Pulleys Are Packed With Screws Finished to Match.

All Pulleys Are Made With Combination Groove,
To Fit Either Chain or Cord.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

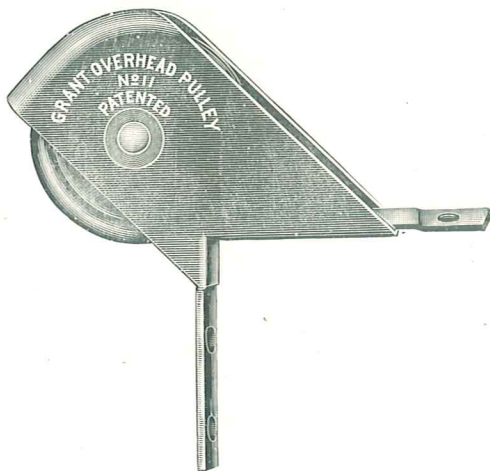
“GRANT” OVERHEAD PRESSED STEEL PULLEYS

FOR

HOLLOW METAL FIREPROOF WINDOWS



No. 10.—2½ In. Wheel.



No. 11.—3 In. Wheel.

PRICE LIST

		No. 10	No. 11
Plain Axle	per doz.	\$3.50	\$5.50
Roller Bearing	“	4.90	6.50
Ball Bearing	“	5.90	7.80

HEIGHTS OF HOUSINGS

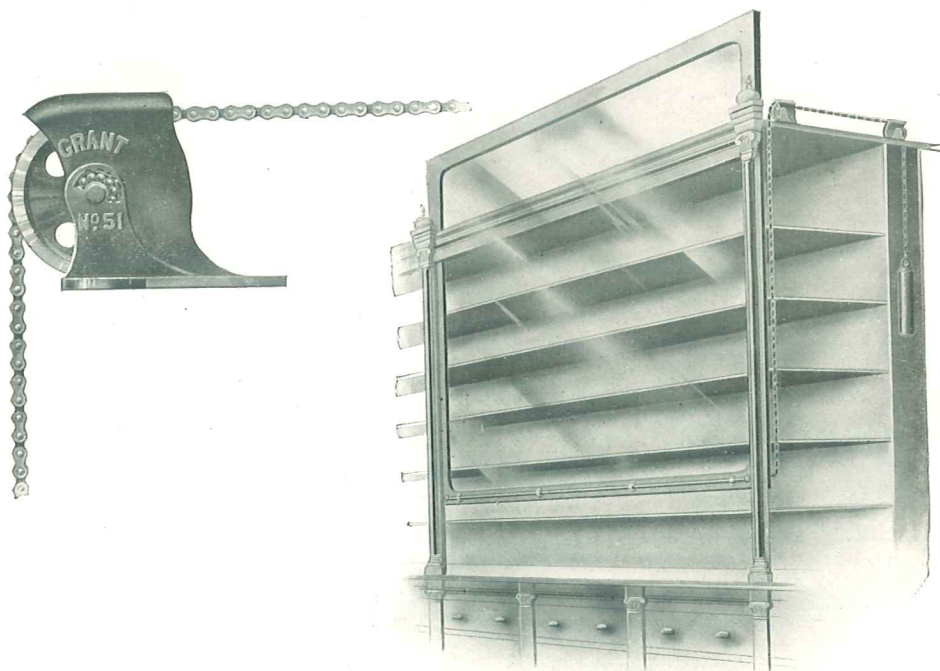
No. 10.....	2¾ Inches
No. 11.....	3¼ “

All Pulleys Are Made With Combination Groove,
To Fit Either Chain or Cord.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT WALL SHOW CASE PULLEYS

ALL KINDS OF SPECIAL PULLEYS MADE TO ORDER



PRICE LIST

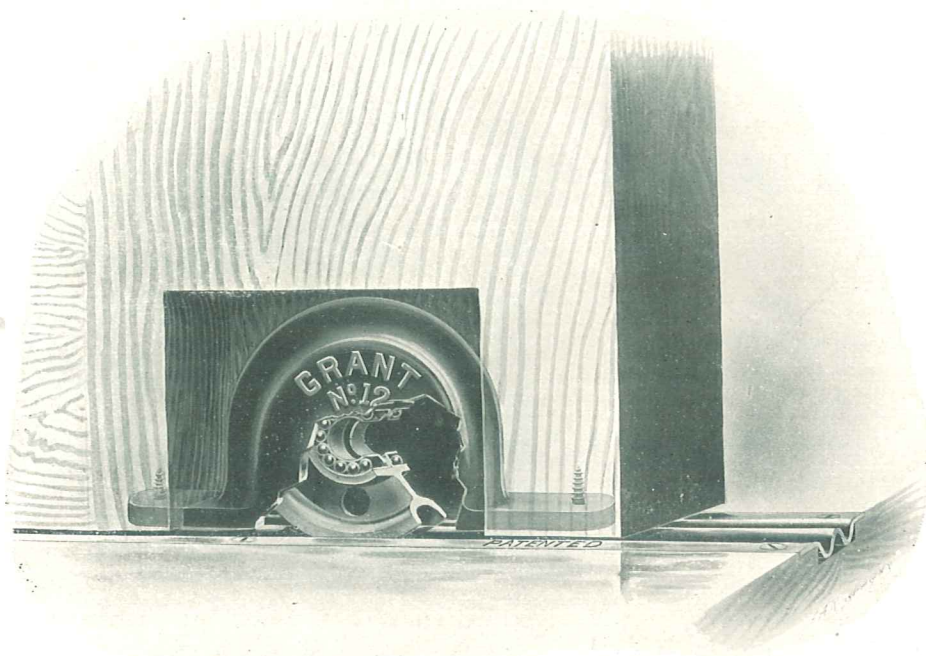
	PLAIN AXLE	ROLLER BEARING	BALL BEARING
No. 50—2½ In. Pulley.....per doz.	\$5.80	\$7.80	\$9.80
No. 51—3 In. Pulley..... “	6.50	8.50	10.50

We also sell sash chains and fixtures for the above pulleys.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT BALL BEARING NOISELESS DOOR SHEAVES AND FLUSH TRACK

Suitable for all Kinds of Cabinet Work where Sliding Doors are Used



PRICE LIST OF ABOVE PULLEYS AND TRACK

No. 12—2 In. Pulley, Ball Bearing.....	per doz.	\$7.70
Brass Track, Double Grooved, 18 B. and S. G.....	per foot	0.26
No. 14—3 In. Pulley, Ball Bearing.....	per doz.	9.60
Brass Track, Double Grooved, 14 B. and S. G.....	per foot	0.40

Track Sold in 2, 4, 6 and 8 foot lengths only.

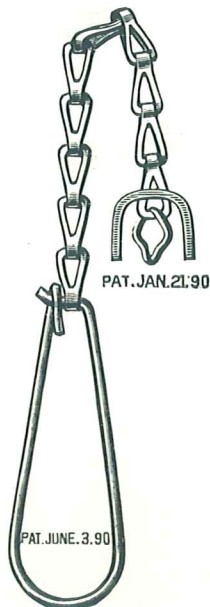
GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

GRANT SASH CHAIN

You Save
TIME AND LABOR
BY
Using our Chain

CHAINS

These chains are uniform, well proportioned for strength and wear, and are made of the best materials known for the purpose. They are guaranteed to stand the strain as indicated below.



These attachments are superior in every way to any on the market for simplicity. No nails, screws or hammering necessary; partly closed eyes in sash weights; no impediment. Parties using these fixtures will save not only time, but chain as well.

BRONZE METAL CHAIN

PRICES ON APPLICATION

- No. 3. Tensile strength, 300 lbs.; for sash not over 60 lbs.....per 100 feet
- No. 2. Tensile strength, 370 lbs.; for sash not over 80 lbs.....per 100 feet
- No. 1. Tensile strength, 475 lbs.; for sash not over 150 lbs.....per 100 feet
- No. 0. Tensile strength, 625 lbs.; for sash not over 200 lbs.....per 100 feet
- No.00. Tensile strength, 750 lbs.; for sash not over 400 lbs.....per 100 feet

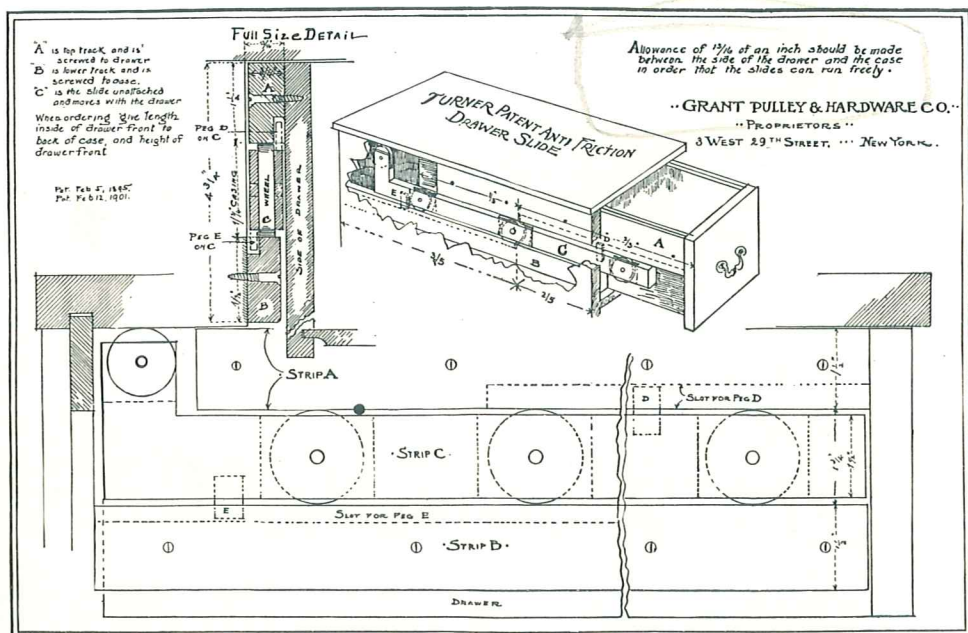
STEEL CHAIN, COPPERED AND PLAIN

- No. 3. Tensile strength, 360 lbs. ; for sash not over 40 lbs.....per 100 feet
- No. 2. Tensile strength, 500 lbs. ; for sash not over 85 lbs.....per 100 feet
- No. 1. Tensile strength, 625 lbs. ; for sash not over 150 lbs.....per 100 feet
- No. 0. Tensile strength, 750 lbs. ; for sash not over 200 lbs.....per 100 feet
- Fixtures for one window, two sashes.....per set

Write for samples and prices.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

THE TURNER PATENT ANTI-FRICTION DRAWER SLIDES AND SUPPORTS



They have been used with entire satisfaction by leading architects and cabinetmakers for six years, under the most exacting conditions, and have been pronounced superior to anything of the kind ever offered.

They are the only drawer slides on the market that are absolutely noiseless.

A drawer fitted with the Turner Attachment cannot fall from the case when pulled out suddenly.

The Turner Attachment is easily applied and never out of order.

It is inexpensive, noiseless and durable.

It enables heavily loaded drawers to slide as easily as if empty, and supports them without sagging when open to their utmost limit.

It is necessary to every piece of furniture having a drawer.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

A FEW ARCHITECTS USING "TURNER" DRAWER SLIDES

McKim, Mead & White, New York.
Carrere & Hastings, New York.
Lord & Hewlett, New York.
Trowbridge & Livingston, New York.
Babb, Cook & Welsh, New York.
R. F. Almira, New York.

Frank Freeman, New York.
Eidlitz & McKenzie, New York.
Whitfield & King, New York.
Watson & Huckle, Philadelphia, Pa.
R. H. Robertson, New York.
Donn Barber, New York.

SOME BUILDINGS IN WHICH "TURNER" DRAWER SLIDES HAVE BEEN USED

Jordon, Marsh & Co., Boston.
Murta, Appleton & Co., Philadelphia.
Tiffany & Co., Fifth Avenue and Thirty-seventh Street, New York.
Union Exchange Bank, Fifth Avenue and Twenty-first Street, New York.
Russell & Erwin Manufacturing Company, Twenty-sixth Street Store, New York.
Gorham Manufacturing Company, Fifth Avenue and Thirty-sixth Street, New York.

PRICE LIST

SUBJECT TO DISCOUNT

"TURNER" PATENT ANTI-FRICTION DRAWER SLIDES AND SUPPORTS

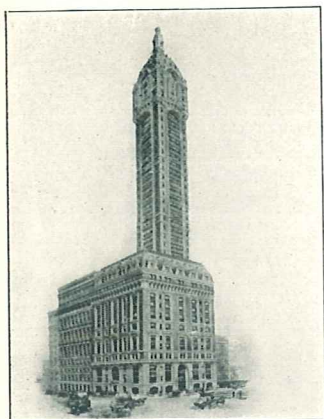
FT.	IN.	IN.	IN.	PER SET	FT.	IN.	IN.	IN.	PER SET
1—	6	x	1½ x ¾	\$3.00	1—	6	x	2 x ¾	\$3.10
1—	8	x	1½ x ¾	3.10	1—	10	x	2 x ¾	3.30
1—	10	x	1½ x ¾	3.20	2—	2	x	2 x ¾	3.50
2—	0	x	1½ x ¾	3.30	2—	6	x	2 x ¾	3.70
2—	2	x	1½ x ¾	3.40	2—	10	x	2 x ¾	3.90
2—	4	x	1½ x ¾	3.50	3—	0	x	2 x ¾	4.10
2—	6	x	1½ x ¾	3.60	3—	4	x	2 x 13/16	4.20
2—	8	x	1½ x ¾	3.70	3—	8	x	2 x 13/16	4.40
2—	10	x	1½ x ¾	3.80	4—	0	x	2 x 13/16	4.60
3—	0	x	1½ x ¾	3.90					

It is necessary when ordering slides to consider the load they are expected to carry. The 2-Inch Slides should be used where a load of more than fifty pounds is to be carried.

When ordering, give length from inside of drawer front to back of case, and height of drawer front.

GRANT PULLEY AND HARDWARE COMPANY

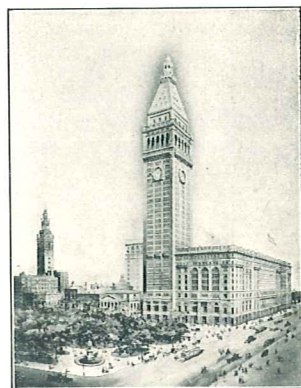
3 WEST 29TH STREET, NEW YORK CITY



SINGER BUILDING, NEW YORK.



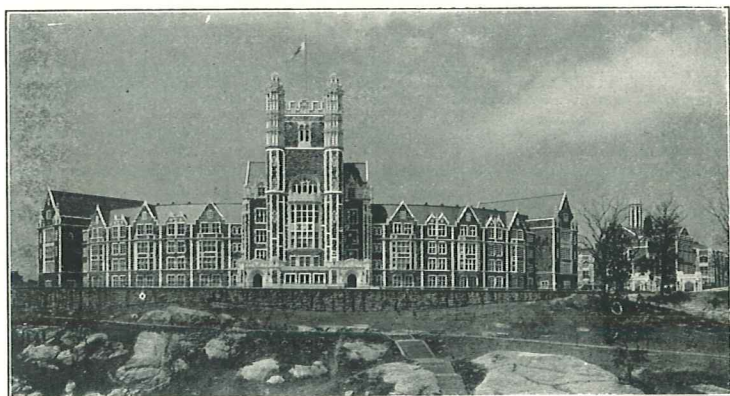
HOTEL KNICKERBOCKER, NEW YORK.



METROPOLITAN TOWER, NEW YORK.

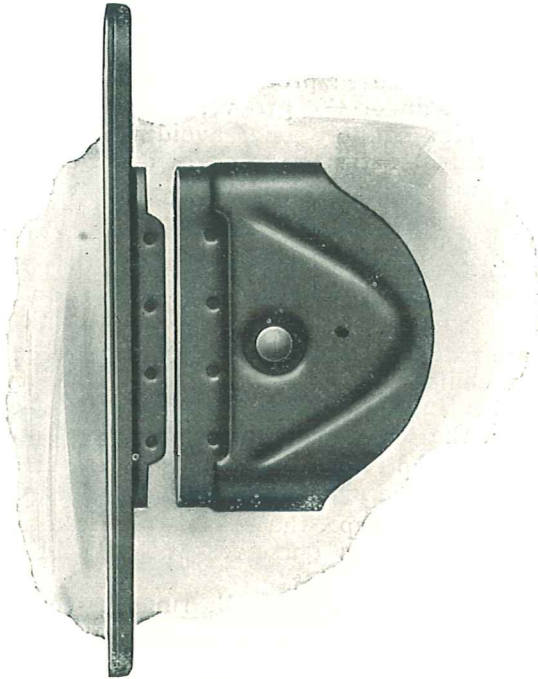
A FEW OF THE
MANY NEW BUILDINGS
EQUIPPED WITH

"GRANT" OVERHEAD
AND AMERICAN
SASH PULLEYS



COLLEGE OF THE CITY OF NEW YORK.

"AMERICAN" PRESSED METAL SASH PULLEYS



Cut showing method of attaching sides of housing to face. The points on the flange of the face register with the depressions in the housing sides, and at the points the parts are electrically welded together.

SOME OF THE ADVANTAGES OF A PRESSED METAL SASH PULLEY OVER A CAST ONE

1. It can not be broken in transit.
2. It can not be broken in putting it into a frame or in handling.
3. In all grades, especially in those with roller and ball bearings, and in the brass and bronze goods it is decidedly cheaper than the corresponding grades of cast pulleys.
4. It weighs only about one-half as much as a cast pulley of the same size, saving cost of transport.
5. It has a better finish.
6. It can be got promptly when wanted.

To sum up briefly our pressed metal sash pulleys are indestructible, and are cheaper, lighter and better finished than cast pulleys, and can be delivered promptly.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

"AMERICAN" PRESSED METAL SASH PULLEYS CONSTRUCTION

The wheels used in our "American" Sash Pulleys, if of brass or bronze, are made by a patented process of locking the two sides together all the way round, just under the groove, by means of a locking ring, so as to make a wheel indissolubly one, avoiding rivets, eyelets, spuds or other inadequate means of trying to effect a union. It is impossible to pull the two halves apart. A 2½-inch wheel will not deform with a load of 600 lbs.

The steel wheels used are made under a patented process by electrically welding the two sides together at a plurality of points. This method has all the advantages of the lock described above, and is in many ways a better method for wheels made of weldable material.

All wheels are made with a combination groove equally well adapted for either cord or chain; and are made with three types of bearings: plain axle, roller-bearing and ball-bearing. The wheels in these three styles differ only in the hubs.

In the plain axle type, the steel bushings are made of extra heavy metal and are locked to the sides of the wheel.—(See Cuts, Page 27).

In the roller-bearing type, the rollers run between a thimble and the axle. We make these rollers ourselves out of cold drawn steel.—(See Cuts, Page 29).

In the ball-bearing type, the balls run between cones and races of hardened steel and bear at three points. The balls used are not ordinary hardware balls commonly used in ball bearing sash pulleys, but are high grade finished steel balls.—(See Cuts, Page 31).

The case, or housing, is also made entirely of pressed metal with no riveted or soldered joints. The cut on the previous page illustrates the method of attaching the face to the housing by the electric welding process mentioned above.

The material used throughout in the construction of our sash pulleys must be of the finest quality on account of the nature of the manufacture.

Axle pins of ample size are made of cold drawn steel and shouldered. The pin is riveted outside of the case or housing, which is held between the riveted head and the shoulder of the axle.

These pins are the same in all three types, but vary a little in size.

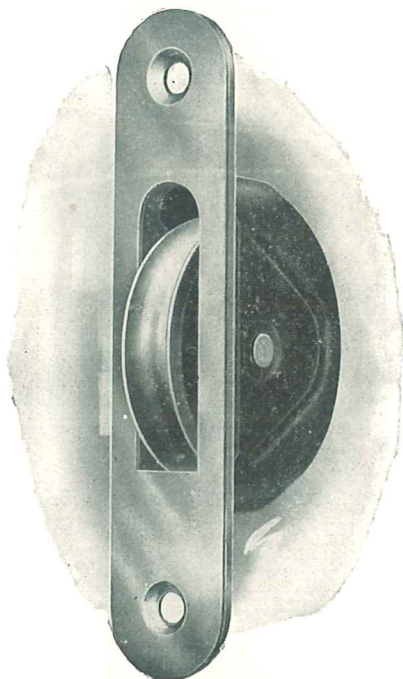
All our sash pulleys are coated with a compound which prevents rust; and, as listed, are packed in boxes with screws finished to match their faces. Our pulleys are patented and are fully guaranteed.

DIMENSIONS OF FACES OF AMERICAN PULLEYS

2 "	1⅛" x 5 "
2¼"	1⅛" x 5½"
2½"	1¼" x 5⅞"
3 "	1⅝" x 6⅜"

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

“AMERICAN” PRESSED METAL SASH PULLEYS



THE “AMERICAN” PULLEY
2 - INCH WHEEL — PLAIN AXLE ONLY

PRICES SUBJECT TO DISCOUNT

	Per Doz.	
	NUMBER	LIST
All steel, lacquered face.....	112	\$1.50
Brass plated face, steel wheel.....	212	1.80
Bronze plated face, steel wheel.....	312	1.90
Brass face, steel wheel.....	412	2.20
Bronze face, steel wheel.....	512	2.40
Brass plated face and wheel.....	222	2.00
Bronze plated face and wheel.....	332	2.10
Brass face, brass plated wheel.....	422	2.40
Bronze face, bronze plated wheel.....	532	2.50
Brass face, brass wheel.....	442	4.00
Bronze face, brass wheel.....	542	4.10
Bronze face, bronze wheel.....	552	4.20

If packed in barrels without screws deduct 6c. per dozen net.

All pulleys are made with combination groove, to fit either chain or cord.

GRANT PULLEY AND HARDWARE COMPANY

3 WEST 29TH STREET, NEW YORK CITY

"AMERICAN" PRESSED METAL SASH PULLEYS

PLAIN AXLE

PRICES SUBJECT TO DISCOUNT

2¼ - INCH WHEEL

	Per Doz.	
	NUMBER	LIST
All steel, lacquered face.....	112¼	\$1.64
Brass plated face, steel wheel.....	212¼	2.00
Bronze plated face, steel wheel.....	312¼	2.10
Brass face, steel wheel.....	412¼	2.44
Bronze face, steel wheel.....	512¼	2.60
Brass plated face and wheel.....	222¼	2.24
Bronze plated face and wheel.....	332¼	2.44
Brass face, brass plated wheel.....	422¼	2.64
Bronze face, bronze plated wheel.....	532¼	2.80
Brass face, brass wheel.....	442¼	4.50
Bronze face, brass wheel.....	542¼	4.70
Bronze face, bronze wheel.....	552¼	4.96

2½ - INCH WHEEL

All steel, lacquered face.....	112½	\$1.80
Brass plated face, steel wheel.....	212½	2.20
Bronze plated face, steel wheel.....	312½	2.30
Brass face, steel wheel.....	412½	2.70
Bronze face, steel wheel.....	512½	2.80
Brass plated face and wheel.....	222½	2.50
Bronze plated face and wheel.....	332½	2.80
Brass face, brass plated wheel.....	422½	2.90
Bronze face, bronze plated wheel.....	532½	3.10
Brass face, brass wheel.....	442½	5.00
Bronze face, brass wheel.....	542½	5.20
Bronze face, bronze wheel.....	552½	5.50

3 - INCH WHEEL

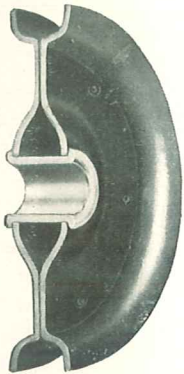
All steel lacquered face.....	113	\$2.26
Brass plated face, steel wheel.....	213	2.70
Bronze plated face, steel wheel.....	313	2.84
Brass face, steel wheel.....	413	3.50
Bronze face, steel wheel.....	513	3.70
Brass plated face and wheel.....	223	3.50
Bronze plated face and wheel.....	333	3.70
Brass face, brass plated wheel.....	423	4.00
Bronze face, bronze plated wheel.....	533	4.40
Brass face, brass wheel.....	443	6.80
Bronze face, brass wheel.....	543	7.00
Bronze face, bronze wheel.....	553	7.50

If packed in barrels without screws deduct 6c. per doz. net.

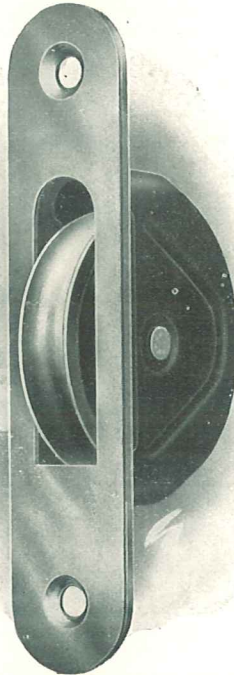
All Pulleys are Packed, 1 Doz. in a Box, with Screws Finished to Match.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

Cuts Showing Construction of Plain Axle Wheels



Section Through Steel
Wheel

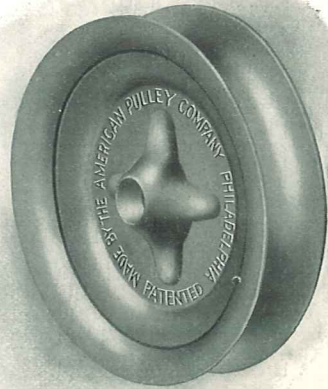


Section Through Brass
or Bronze Wheel

Approximately Half Size—3" Wheel



STEEL WHEEL
Electrically Welded



BRASS OR BRONZE WHEEL
Locking Ring

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

“AMERICAN” PRESSED METAL SASH PULLEYS ROLLER BEARING

PRICES SUBJECT TO DISCOUNT.

	Per NUMBER	Doz. LIST
2¼ - INCH WHEEL		
All steel, lacquered face.....	8112¼	\$2.14
Brass plated face, steel wheel.....	8212¼	2.50
Bronze plated face, steel wheel.....	8312¼	2.60
Brass face, steel wheel.....	8412¼	2.94
Bronze face, steel wheel.....	8512¼	3.10
Brass plated face and wheel.....	8222¼	2.74
Bronze plated face and wheel.....	8332¼	2.94
Brass face, brass plated wheel.....	8422¼	3.14
Bronze face, bronze plated wheel.....	8532¼	3.30
Brass face, brass wheel.....	8442¼	5.00
Bronze face, brass wheel.....	8542¼	5.20
Bronze face, bronze wheel.....	8552¼	5.46

2½ - INCH WHEEL		
All steel, lacquered face.....	8112½	\$2.30
Brass plated face, steel wheel.....	8212½	2.70
Bronze plated face, steel wheel.....	8312½	2.80
Brass face, steel wheel.....	8412½	3.20
Bronze face, steel wheel.....	8512½	3.30
Brass plated face and wheel.....	8222½	3.00
Bronze plated face and wheel.....	8332½	3.30
Brass face, brass plated wheel.....	8422½	3.40
Bronze face, bronze plated wheel.....	8532½	3.60
Brass face, brass wheel.....	8442½	5.50
Bronze face, brass wheel.....	8542½	5.70
Bronze face, bronze wheel.....	8552½	6.00

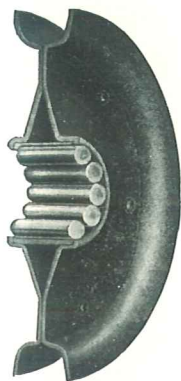
3 - INCH WHEEL		
All steel, lacquered face.....	8113	\$2.86
Brass plated face, steel wheel.....	8213	3.30
Bronze plated face, steel wheel.....	8313	3.44
Brass face, steel wheel.....	8413	4.10
Bronze face, steel wheel.....	8513	4.30
Brass plated face and wheel.....	8223	4.10
Bronze plated face and wheel.....	8333	4.30
Brass face, brass plated wheel.....	8423	4.60
Bronze face, bronze plated wheel.....	8533	5.00
Brass face, brass wheel.....	8443	7.40
Bronze face, brass wheel.....	8543	7.60
Bronze face, bronze wheel.....	8553	8.10

If packed in barrels without screws deduct 6c. per dozen net.

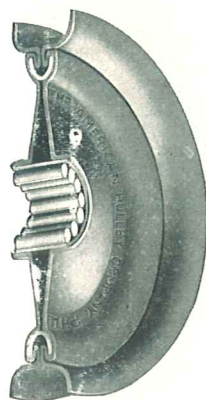
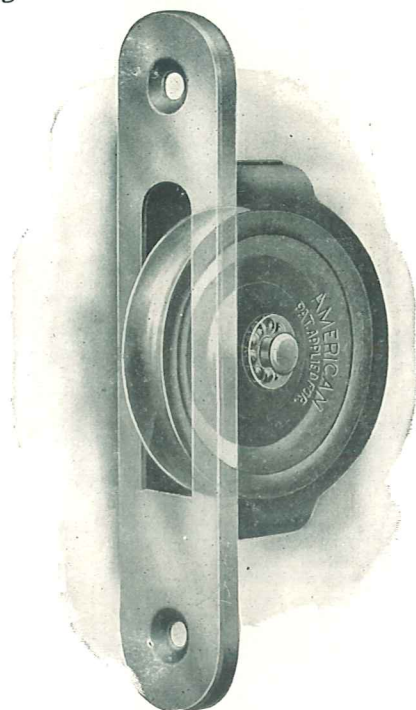
All pulleys are made with combination groove, to fit either chain or cord.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

Cuts Showing Construction of Roller Bearing Wheels

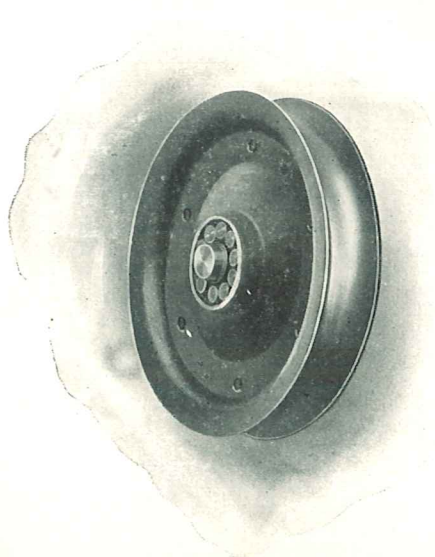


SECTION
STEEL WHEEL

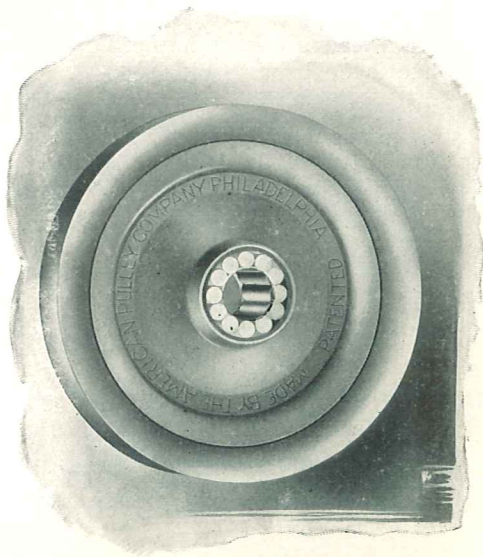


SECTION
BRASS OR BRONZE
WHEEL

Approximately Half Size—3" Wheel



STEEL WHEEL
Electrically Welded



BRASS OR BRONZE WHEEL
Locking Ring

GRANT PULLEY AND HARDWARE COMPANY

3 WEST 29TH STREET, NEW YORK CITY

"AMERICAN" PRESSED METAL SASH PULLEYS BALL BEARING

PRICES SUBJECT TO DISCOUNT

2¼ - INCH WHEEL

	Per Doz.	
	NUMBER	LIST
All steel, lacquered face	9112¼	\$2.64
Brass plated face, steel wheel.....	9212¼	3.00
Bronze plated face, steel wheel.....	9312¼	3.10
Brass face, steel wheel.....	9412¼	3.44
Bronze face, steel wheel.....	9512¼	3.60
Brass plated face and wheel.....	9222¼	3.24
Bronze plated face and wheel.....	9332¼	3.44
Brass face, brass plated wheel.....	9422¼	3.64
Bronze face, bronze plated wheel.....	9532¼	3.80
Brass face, brass wheel.....	9442¼	5.50
Bronze face, brass wheel.....	9542¼	5.70
Bronze face, bronze wheel.....	9552¼	5.96

2½ - INCH WHEEL

All steel, lacquered face	9112½	\$2.80
Brass plated face, steel wheel.....	9212½	3.20
Bronze plated face, steel wheel.....	9312½	3.40
Brass face, steel wheel.....	9412½	3.70
Bronze face, steel wheel.....	9512½	3.80
Brass plated face and wheel.....	9222½	3.50
Bronze plated face and wheel.....	9332½	3.80
Brass face, brass plated wheel.....	9422½	3.90
Bronze face, bronze plated wheel.....	9532½	4.10
Brass face, brass wheel.....	9442½	6.00
Bronze face, brass wheel.....	9542½	6.20
Bronze face, bronze wheel.....	9552½	6.50

3-INCH WHEEL

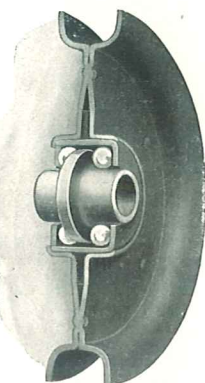
All steel, lacquered face.....	9113	\$3.36
Brass plated face, steel wheel.....	9213	3.80
Bronze plated face, steel wheel.....	9313	3.94
Brass face, steel wheel.....	9413	4.60
Bronze face, steel wheel.....	9513	4.80
Brass plated face and wheel.....	9223	4.60
Bronze plated face and wheel.....	9333	4.80
Brass face, brass plated wheel.....	9423	5.10
Bronze face, bronze plated wheel.....	9533	5.50
Brass face, brass wheel.....	9443	7.90
Bronze face, brass wheel.....	9543	8.10
Bronze face, bronze wheel.....	9553	8.60

If Packed in Barrels Without Screws Deduct 6c. per dozen net.

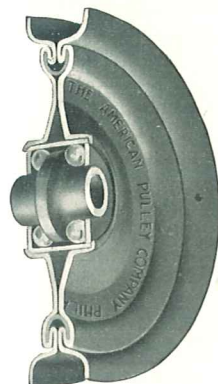
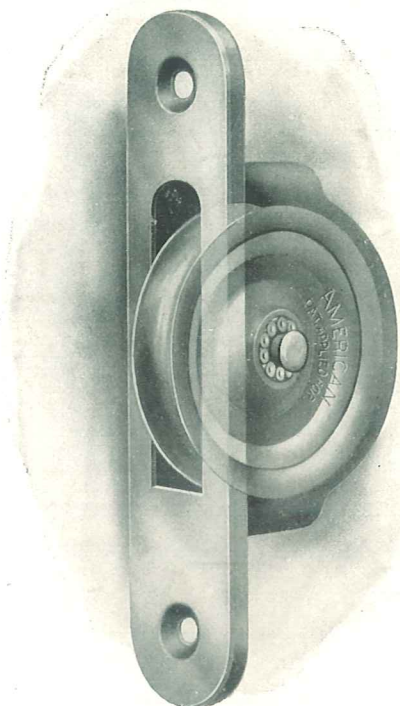
All Pulleys are Packed, 1 Doz. in a Box, with Screws Finished to Match.

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

Cuts Showing Construction of Ball Bearing Wheels

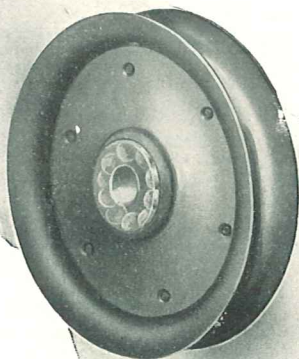


SECTION
STEEL WHEEL

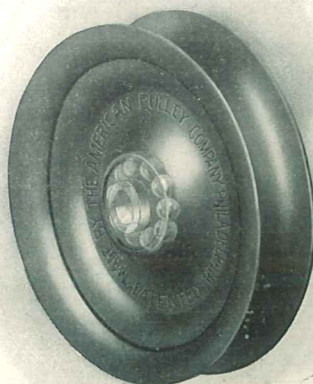


SECTION
BRASS OR BRONZE
WHEEL

Approximately Half Size—3" Wheel



STEEL WHEEL
Electrically Welded



BRASS OR BRONZE WHEEL
Locking Ring

GRANT PULLEY AND HARDWARE COMPANY
3 WEST 29TH STREET, NEW YORK CITY

PARTIAL LIST OF BUILDINGS EQUIPPED WITH PULLEYS SOLD BY GRANT PULLEY & HARDWARE CO.

NAME OF BUILDING	LOCATION	NAME OF ARCHITECT
Metropolitan Life Building.....	New York.....	N. Le Brun & Sons.
Singer Building.....	"	Ernest Flagg.
U. S. Realty Building.....	"	F. H. Kimball.
Trinity Building.....	"	F. H. Kimball.
City Investing Building.....	"	F. H. Kimball.
Hudson Terminal Building...	"	Clinton & Russell.
U. S. Custom House.....	"	Cass Gilbert.
Flat Iron Building.....	"	D. H. Burnham & Co.
Times Building.....	"	Eidlitz & McKenzie.
N. Y. Stock Exchange.....	"	George B. Post.
Knickerbocker Trust Co.	"	McKim, Mead & White.
Produce Exchange Bank	"	Ernest Flagg.
Hotel Belmont.....	"	Warren & Wetmore.
Hotel St. Regis.....	"	Trowbridge & Livingston.
Blair Building.....	"	Carrere & Hastings.
Knickerbocker Hotel.....	"	Marvin & Davis.
Plaza Hotel.....	"	H. J. Hardenburg.
Fraunce's Tavern.....	"	W. H. Mesereau.
West Street Building.....	"	Cass Gilbert.
Title Guarantee & Trust Co..	"	Howells & Stokes.
German American Ins. Bldg..	"	Hill & Stout.
Trust Co. of America Bldg....	"	F. H. Kimball.
Misses Ely School.....	Greenwich, Conn....	Carrere & Hastings.
Court House.....	Brunswick, Ga.....	C. A. Gifford.
J. D. Rockefeller, Residence..	Pocantico Hills, N. Y.	Delano & Aldrich.
P. A. Rockefeller, Residence..	Greenwich, Conn....	Hess & Weeks.
Bessemer Office Building....	Pittsburg, Pa.....	Grosvenor Attebury.
Yale Dormitories.....	New Haven, Conn..	C. C. Haight.
Annapolis Cadet Quarters. .	Annapolis, Md....	Ernest Flagg.
Carnegie Technical Schools..	Pittsburg, Pa.....	Palmer & Hornbostel.
Ingleside School.....	New Milford, Conn.	Rossiter & Wright.
West Point Buildings.....	West Point, N. Y...	Cram, Goodhue & Ferguson
League Island Navy Yard....	Philadelphia, Pa...	J. Knox Taylor.
U. S. Post-Office.....	Oakland, Cal.....	J. Knox Taylor.
Mt. Sinai Hospital.....	New York, N. Y....	A. W. Brunner.
St. Luke's Hospital.....	New York, N. Y....	Ernest Flagg.
Moses Taylor Hospital.....	Buffalo, N. Y.....	Warren & Wetmore.
Jamaica Plain Hospital.....	Boston, Mass.....	Coolidge & Carlson.
Massachusetts Gen. Hospital.	Boston, Mass.....	Wheelwright & Haven.

MARCH—1911

THIRD EDITION

